

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604**

October 13, 2021

Sent via email

Mike Samples
de maximis, Inc.
450 Montbrook Lane
Knoxville, TN 37919

Re: Agency comments on Pre-final (95%) Design Report, North Sanitary Landfill, Dayton, Ohio

Dear Mike:

Enclosed you will find comments on the aforementioned document.

General comments

Valleycrest Drive. As outlined below, EPA will not be approving the road design (City of Dayton will approve), but will be approving any stormwater improvements along the road, how stormwater from the road will be managed onsite, and any other impacts on the cap. Will stormwater be directed to the stormwater pond-if so, how? Will there be any temporary storage areas near the road from which stormwater will be managed in accordance with the site-wide stormwater design? The final RD should contain the appropriate stormwater information.

Confirmation sampling. Excavations in disposal area 4 and in the off-property waste areas must be verified through appropriate confirmation sampling of the bottom and sidewalls. Visual inspection is not adequate and does not fully answer the question for property specific ICs. As outlined below, please provide confirmation sampling for excavation areas in the final design.

Natural attenuation evaluation. Previous comments from the pre-design report should be included in Appendix J. Attenuation parameters should be included with other monitoring parameters as part of routine monitoring to complete the data collection required to consider NA.

Imported soil testing. Any soil imported for remedy construction must meet *Ohio Voluntary Action Program-Table I Residential Generic Direct Contact Soil Standards*. Please update the design to include this information.

Vegetative layer. EPA had forwarded to the PRPs a suggested vegetative mix earlier this summer that utilized native plantings that would be compatible with the cap. Geosyntec indicated that these mixes looked acceptable and would be reflected in the 95% RD. Please update the appropriate sections of this report to include these mixes and to indicate that they will be used to the maximum extent possible

Specific comments

1. Page 3-1 Section 3.1. This section should state CERCLA Section 121 (e) in its entirety with no paraphrasing with respect to permits. Please modify the text to state the following after “Plan specifies that” in the first sentence; “No Federal, State or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section.”
2. Page 4-1 Section 4.2. Please revise the title to this section to “solid waste landfill cap and access roads”, to be consistent with the title on page 4-3.
3. Page 4-3 Section 4.1.5. Appropriate confirmation sampling is required for waste on the OPBWA and City Lot 74625 and in disposal area 4. This is necessary to determine concentrations being left behind requiring institutional controls.

Additional detail on what portion of disposal area 4 will be used for subbase or bedding materials is needed here-the 30% RD stated that this would be part of the 95% RD.

4. Page 4-4 last par. Additional design details, using materials such as geotextile or armoring, are necessary for the area where the sand layer is designed to daylight. Additional design details to document sizing of the down chutes and any impacts on erosion, and detail on why there are no down chutes for a portion of disposal area 3 where overland stormwater management flow is included, should be provided. Please update the design.
5. Page 4-5 GCL section. The 30% RD stated that the GCL materials and specifications would be presented in the 95% RD. This section indicates that final selection will be selected during the RA with no accompanying documentation.

EPA must approve these materials—please provide anticipated materials in this section for EPA approval. Please update the RAWP to include Agency review for any circumstances where RA contractor input impacts the approved design materials,

including the requirement that any proposal be accompanied by a performance equivalency demonstration.

6. Page 4-6 Section 4.2.4. The 30% RD stated that a soil acquisition plan would be included in the 95% RD along with a plan for soil testing that satisfies OEPA requirements. Please update the design.
7. Page 4-7 fill layer. Inclusion of wood chips in the fill layer conflicts with Specification 31.00.00, which indicates that fill shall be homogeneous, natural soils free from debris, foreign objects and organic material-please correct this discrepancy.
8. Page 4-8 FML. Availability of liner crews is not a criterion for FML determination. Please remove.
9. Page 4-9 Section 4.3.4. The City has expressed concern about the unlined stormwater pond and potential impacts from leachate at the site to the underlying high yield aquifer. Including NSL-47S in the sitewide groundwater monitoring plan going forward will address this concern.

There have been historical MCL exceedances at this location and ongoing monitoring from this location will provide data to show that the leachate collection system is performing as designed, as well as providing groundwater data to the community showing that the infiltration through the stormwater pond will not have any deleterious impacts on the aquifer. Please include NSL-47S in the sitewide monitoring plan.

Please also include an access road around the stormwater pond area, for ease of inspection and for ongoing maintenance needs. This road should be maintained into the future as outlined above.

10. Page 4-11 1st 4 bullets. The RD states that perimeter ditches with flow greater than 5 ft/sec will be lined with riprap, but ditch D-1 does not include. Please correct.
11. Page 4-11 bullet 6 and 7. Please include the specific language from the PRP response to comment 22 in these bullets.
12. Page 4-11 last bullet. Please modify the text to indicate that the regulatory design storm is a 100-year storm.
13. Page 4-11 Section 4.4. Please provide appropriate details or drawings showing NAPL recovery container type, transfer piping or secondary containment.
14. Page 4-11 Section 4.4.1. These sentences are contradictory. Are they to be preserved or replaced? Please correct.

15. Page 4-12 Section 4.4.4. The site monitoring plan indicates that all wells will be screened for NAPL as part of ongoing monitoring. Please correct.
16. Page 4-12 Section 4.4.5 b. Please update the text with language from the response to comment. The term periodic is undefined. NAPL collection should be aggressive and frequent. What are completion criteria for determination that NAPL monitoring is no longer necessary? Please include completion criteria in text. Where will the NAPL be stored temporarily before disposal?
17. Page 4-13 Section 4.5.1. 2nd bullet. Please include the RAO from ROD for restoration of groundwater to beneficial use at and beyond the point of compliance within a reasonable timeframe.
18. Page 4-13 Section 4.5.3. The 30% RD report indicated that an optimization of the leachate well design would be part of this report—was this completed? If so, please provide.
19. Page 4-14 last par. Please state that the access roads to the AST and the LFG flare can be found in the drawings where they are illustrated.
20. Page 4-15 top par. Please include a process for making a final decision for leachate disposal.
21. Page 4-16 Section 4.6.5. LFG monitoring will be conducted in accordance with OAC 3745-27-12. Previous Agency comments required monitoring for VOCs that may migrate with methane. Please modify the text to include this and update the SWMP (Appendix J) to include VOC monitoring at select LFG probes as part of system operation.
22. Page 5-1 Section 5.2. The final RD will not approve the road redesign. This process should be deferred to the RA workplan as an implementation issue. Please summarize any impacts on the cap, such as stormwater management, from the road design. It is unclear how stormwater from the newly constructed road will be managed in the proposed stormwater management areas.
23. Page 5-2 par 3. This assessment will also include the additional areas identified by the OEPA that were recently reassessed.
24. Page 5-2 Section 5.2.2.2 par 3. The decision on either mitigation or in lieu fee for wetlands restoration should be deferred to the RAWP. The 95% design should include a design with and without the wetlands area, with any decision presented to the Agencies for review/approval.

25. Page 5-3 Section 5.2.2.4. Design of the additional wetland areas must be included in this section. Details on the decision for an in lieu fee substitution should be included in the RAWP.
26. Page 5-3 Section 5.2.3. Site fencing will extend to the property boundary in all directions—please update the text. EPA’s previous comment regarding signage on the fence was not included in the text here—please also include a specification for signs.
27. Appendix A Drawing 9 of 44. This drawing is missing proposed monitoring well MA-01—please revise.
28. Appendix A Drawing 12 of 44. Note 5. This note indicates that locations may change during construction. Please provide a detailed contingency plan for any updates, included provisions for Agency review and approval.
29. Appendix A Drawing 32 of 44 SW details, detail 6. Will the perforated section of the catch basin be wrapped with fabric to prevent sand influx into the catch basin? Please update.
30. Appendix B.1 Section 6.2.4, page 6-4. Please update to show how temporary NAPL storage on top of the final cap will be appropriately contained from impacting the cover system.
31. Appendix B.2 earthworks Section 31.02.04. None of the areas to be cleared and stripped are identified on the drawings. Please correct.
32. Appendix C-1 page 2. The compression index value of 0.163 is on the low end of ranges for solid waste. Please provide documentation for this value.
33. Appendix C-1 Figure 10. The cross section for profile 3 does not match the profile shown on figure 5. The long-term surface for this profile appears to show a low point where water may pond. Please correct.
34. Appendix C.3. cover stability. Page 6 of 7. This calculation indicates that a 60 ml HDPE will be used instead of a 40 ml and does not include a GCL. Table 1 also indicates the use of a 60 ml HDPE. Please correct.
35. Appendix D Page 5 of 77. Please provide additional detail for stormwater management for those areas where the text indicates infeasibility for stormwater features, such as the SE side of the pond next to the Valleycrest Drive right of way. In this area, the design indicates localized detention or infiltration areas.
36. Appendix D Page 9 of 77. Please see comment 25.

37. Appendix E page 6 of 14. 1st bullet. The calculated drainage numbers appear inconsistent here- values of 98,000, 2.98M and 3.8M are presented. Please correct.
38. Appendix I Page 2-4 Section 2.3. The 30% RD indicated that this report would include leachate storage design, secondary containment, level monitoring, alarms, and freeze protection for the aboveground storage requirements. Please update.
39. Appendix I Section 4. Please see comment 1 above to correct references to NCP here.
40. Appendix I Page 5-3 Section 5.2 reporting. The 30% RD indicated that an outline and table of contents and inspection forms would be included for the annual report—please update the text.
41. Appendix I Page 8-3 par 2. Please provide details on the clearing activities in the basin and improved wetlands area to highlight any variances from clearing for the rest of the site.
42. Appendix I Page 8-3 par 3. What does 25% reference here? Is this a defined area? Please correct.
43. Appendix I Page 8-3 par 5. Please include details for burrow repair.
44. Appendix I Page 8-4 Section 8.1.3.6. Please include details for repair for signs.
45. Appendix I Page 8-13 Section 8.6. Please include provisions for annual certification for ICs.
46. Appendix I Appendix A. Inspection spelled incorrectly.
47. Appendix J Page 3-6 Section 3.8.3. Please include a provision for offsite monitoring for LFG exceedances. It is recommended that monthly monitoring be included for the first 6 months following RA construction completion, followed by quarterly monitoring to show the effectiveness of the LFG system—please update the text appropriately.
48. Appendix J Page 4-1 Section 4.1. Please include analysis for 1,4 dioxane in ongoing groundwater/leachate monitoring.
49. Appendix J Page 4-1 Section 4.2. Please include full contaminant scans for leachate well sampling.
50. Appendix J Page 5-2 Section 5.5. Annual hydraulic and chemistry monitoring does not meet OAC 3745-27-10 D. Please revise to be consistent with this regulation.

51. Appendix J Page 5-2 Section 5.6 Lab analysis. Please list the NA parameters and any field parameters included in the site monitoring.
52. Appendix J Page 5-3 Section 5.8. Please update this table to be consistent with the table in the ROD.
53. QAPP worksheet #11. Please include a problem statement for this worksheet to indicate the problems being addressed.
54. Division 1, Section 01.50.00, Section 1.03 A. Space for EPA, EPA contractors and OEPA should also be provided in the field office.
55. Division 31, part 3, Section 3.04 A. It is unclear why the geomembrane would be installed below the GCL as stated here. This is inconsistent with the ARAR-please correct.
56. Division 33, Section 33.05.00, Section 1.01. The temporary LFG system is aboveground...it is unclear why this specification indicates abandonment in place. Please correct.

If you have any questions regarding these comments, please contact me. The 100% RD report addressing these comments is due 60 days from receipt of this letter.

Sincerely yours,

Dion Novak

Dion Novak
Remedial Project Manager

cc: S. Glum, OEPA
B. Martin, Toeroek